

ASSIGNED

AMENDED

Nº 50378

## APPLICATION FOR PERMIT

## TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office..... NOV 24 1986

Returned to applicant for correction..... DEC 05 1986

Corrected application filed..... DEC 16 1986

Map filed..... DEC 16 1986 under 50375

The applicant..... TRANS-PACIFIC GEOTHERMAL CORPORATION

1330 BROADWAY, SUITE 1525, of OAKLAND, City or Town

Street and No. or P.O. Box No.

CALIFORNIA 94612, hereby make.... application for permission to appropriate the public

State and Zip Code No.

waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) INCORPORATED 10/15/85

AT RENO, NEVADA

1. The source of the proposed appropriation is..... THE STILLWATER GEOTHERMAL RESERVOIR  
Name of stream, lake, spring, underground or other source
2. The amount of water applied for is..... 3.6 ..... second-feet  
One second-foot equals 448.83 gals. per min.  
(a) If stored in reservoir give number of acre-feet..... N/A
3. The water to be used for..... DOMESTIC AND INDUSTRIAL  
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.
4. If use is for:
  - (a) Irrigation, state number of acres to be irrigated.....
  - (b) Stockwater, state number and kinds of animals to be watered.....
  - (c) Other use (describe fully under "No. 12. Remarks").....
  - (d) Power:
    - (1) Horsepower developed..... 10 MW ELECTRIC  
SPENT GEOTHERMAL BRINE WILL BE REINJECTED INTO
    - (2) Point of return of water to stream..... GEOTHERMAL RESERVOIR.
5. The water is to be diverted from its source at the following point..... LOCATED IN THE NW¼ OF NW¼  
Describe as being within a 40-acre subdivision of public  
SEC. 7, T19N, R31E, MDB&M; FROM SAID POINT THE NE CORNER OF SEC. 1,  
survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.  
T19N, R30E, MBD&M BEARS N 09° 50' 41" W A DISTANCE OF 5676.02 FEET.
6. Place of use..... NE¼ NE¼, SEC. 1, T19N, R30E, MBD&M  
Describe by legal subdivision. If on unsurveyed land, it should be so stated.
7. Use will begin about..... JAN. 1 ..... and end about..... DEC. 31 ..... of each year.  
Month and Day Month and Day
8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.)..... GEOTHERMAL WELL AS PER ATTACHED  
State manner in which water is to be diverted, i.e. diversion structure, ditches and  
SCHEMATIC DIAGRAM. — WELL WILL PRODUCE BY SELF-INDUCED FLASH FLOW.  
flumes, drilled well with pump and motor, etc.
9. Estimated cost of works..... \$250,000.00

10. Estimated time required to construct works..... 30 DAYS  
If well completed, describe works.

11. Estimated time required to complete the application of water to beneficial use..... 1 YEAR

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

PRODUCED WATER WILL BE USED TO OPERATE A HYBRID FLASHED STEAM-BINARY  
 POWER PLANT. 10% OF THE PRODUCED FLUID WILL BE CONSUMED IN THE POWER  
 PLANT COOLING TOWER. 90% OF THE PRODUCED FLUID WILL BE REINJECTED  
 INTO THE GEOTHERMAL RESERVOIR. THE TOTAL ANNUAL CONSUMPTIVE USE  
 WILL BE 774 ACRE-FEET.

By s/ illegible  
 1330 BROADWAY, SUITE 1525  
 OAKLAND, CA 94612

Compared js/se.....pm/hc.....

Protested.....

APPROVAL.....OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection wells are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection wells. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection wells and/or other analyses of the system used for returning the used geothermal  
 (CONTINUED ON PAGE 2)

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.6 cubic feet per second, but not to exceed a consumptive use of 261 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before March 10, 1989

Proof of completion of work shall be filed on or before April 10, 1989

Application of water to beneficial use shall be made on or before March 10, 1992

Proof of the application of water to beneficial use shall be filed on or before April 10, 1992

Map in support of proof of beneficial use shall be filed on or before.....

Completion of work filed..... IN TESTIMONY WHEREOF, I..... PETER G. MORROS.....  
 State Engineer of Nevada, have hereunto set my hand and the seal of

Proof of beneficial use filed..... my office, this 2nd day of June.....

Cultural map filed.....

Certificate No. .... Issued.....

A.D. 19 87

*[Signature]*  
 State Engineer

Abrogated By 64303.3.6

## (PERMIT TERMS CONTINUED)

fluids to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2606 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 10% of the volume withdrawn annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

This Permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

This permit is issued under the provisions of NRS 534.120(2) as a preferred use.

The total combined duty of water under Permits 30683, 30684, 50025, 50375, 50376, 50377 and 50378 shall not exceed 3620 acre-feet annually.

